

## Figure 2

T7 promoter

 ${\tt AGATCTCGATCCCGCGAAATTAATACGACTCACTAT} {\tt AGGGGGAATTGTGAGCGGATAACAATTCCCCC}$ 

## RBS

## TCTAGAAATAATTTTGTTTAACTTTAAGAAGGAGATATACC

Bpull02 I T7 terminator

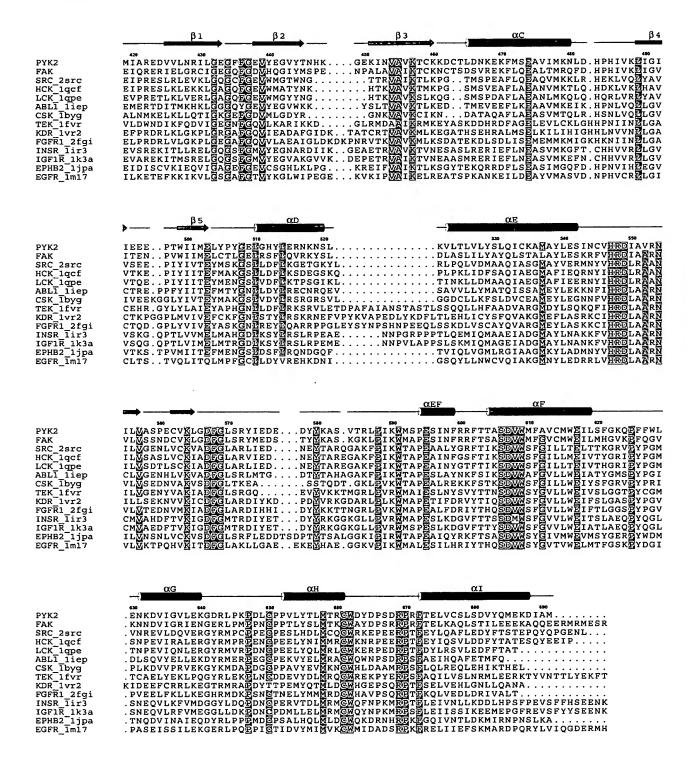
CTGCTGCCACCGCTGAGGAATAACTAGCATAACCCCTTGGGGCCTCTAAACGGGTCTTGAGGGTTTTT

TG

3'-PET Primer

Figure 3

100



## Figure 4

4A: 1 MGSSHHHHHH SSGLVPRGSH MIAREDVVLN RILGEGFFGE VYEGVYTNHK GEKINVAVKT 61 CKKDCTLDNK EKFMSEAVIM KNLDHPHIVK LIGIIEEEPT WIIMELYPYG ELGHYLERNK 121 NSLKVLTLVL YSLQICKAMA YLESINCVHR DIAVRNILVA SPECVKLGDF GLSRYIEDED 181 YYKASVTRLP IKWMSPESIN FRRFTTASDV WMFAVCMWEI LSFGKQPFFW LENKDVIGVL 241 EKGDRLPKPD LCPPVLYTLM TRCWDYDPSD RPRFTELVCS LSDVYQMEKD IAM 4B: PYK2-C1; 5'-TCCACAG CATATG ATTGCCCGTGAAGATGTGGT-3' 33 mer 4C: TGGAGAAGGACATTGCCATG TAG GTCGAC GAGAG (Origin) PYK2-N2; 5'-CTCTC GTCGAC CTA CATGGCAATGTCCTTCTCCA-3' 4D: TCTAGAAATAATTTTGTTTAACTTTAAGAAGGAGA TATACCATGGGCAGCCATCATCATCATCACCAGCAGCGGCCTGGTGCCGCGCGGCAGCCATATG attgcc cgtgaagatg 1381 tggtcctgaa tcgtattctt ggggaagget tttttgggga ggtctatgaa ggtgtctaca 1441 caaatcacaa aggggagaaa atcaatgtag ctgtcaagac ctgcaagaaa gactgcactc 1501 tggacaacaa ggagaagttc atgagcgagg cagtgatcat gaagaacctc gaccacccgc 1561 acategtgaa getgategge atcattgaag aggageeeae etggateate atggaattgt 1621 atccctatgg ggagctgggc cactacctgg agcggaacaa gaactccctg aaggtgctca 1681 ccctcgtgct gtactcactg cagatatgca aagccatggc ctacctggag agcatcaact 1741 gegtgcacag ggacattgct gtccggaaca tcctggtggc ctcccctgag tgtgtgaagc 1801 tgggggactt tggtctttcc cggtacattg aggacgagga ctattacaaa gcctctgtga 1861 ctcgtctccc catcaaatgg atgtccccag agtccattaa cttccgacgc ttcacgacag 1921 ccagtgacgt ctggatgttc gccgtgtgca tgtgggagat cctgagcttt gggaagcagc 1981 ccttcttctg gctggagaac aaggatgtca tcggggtgct ggagaaagga gaccggctgc 2041 ccaagectga tetetgteca eeggteettt ataceeteat gaeeegetge 2101 accccagtga ccggccccgc ttcaccgagc tggtgtgcag cctcagtgac gtttatcaga 2161 tggagaagga cattgccatg TAGGTCGACTAGAGCCTGCAGTCTCGACCATCATCATCATCATTAATAAAAGGGCG AATTCCAGCACACTGGCGGCCGTTACTAGTGGATCCGGCTGCTAACAAAGCCCGAAAGGAAGCTGAGTT GG